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Claims

1. A method of reconstructing a mammalian embryo, the method comprising transferring a lymphocyte into a suitable recipient.
2. The method according to claim 1 further comprising the step of isolating the nucleus of the lymphocyte before transfer of said nucleus into the recipient.
3. Method according to claim 1 or 2 in which the mammal is an ungulate species.
4. Method according to any preceding claim further comprising the step of genetically modifying the nucleus of the lymphocyte.
5. Method according to any preceding claim in which the recipient is an enucleate oocyte.
6. A method of reconstructing a mammalian embryo comprising reconstructing a first generation embryo by the steps of a method according to any of claims 1 to 5 and further comprising transferring a cell from the said first generation embryo to a suitable recipient to form a second generation embryo.
7. A method of reconstructing a mammalian embryo comprising reconstructing a first generation fetus by development of a first generation embryo reconstructed by a method of any of claims 1 to 5, preparing fetal fibroblast cultures therefrom and transferring cells from the said fetal fibroblast cultures to a suitable recipient to form a second generation embryo.
8. A method according to claim 7 further comprising the step of genetic modification of the cells of the fetal fibroblast cultures prior to second generation cloning.
9. A method of preparing a mammal, the method comprising:
reconstructing a mammalian embryo using a method according to any preceding claim;

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allowing the embryo so produced to develop to term; and
optionally breeding from the mammal so formed.

10. A method of preparing embryonic stem cell lines, comprising
reconstructing a mammalian embryo using a method according to any of
claims 1 to 8 and transferring the embryo to a culture system.

11. A method of preparing embryonic stem cell lines, comprising
reconstructing a mammalian embryo using a method according to any of
claims 1 to 8; isolating the inner cell mass of the embryo from the
embryo and transferring the inner cell mass to a culture system.

12. A method according to claim 10 or 11 further comprising the step
of genetic modification of the stem cells.